

7/10
AF

PTO/SB/21 (09-04)
Approved for use through 07/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/900,334	
	Filing Date	July 6, 2001	
	First Named Inventor	Peter K. Malkin	
	Art Unit	3627	
	Examiner Name	Laneau, Ronald	
Total Number of Pages in This Submission	15	Attorney Docket Number	YOR920010313US1 (8728-508)

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	F. Chau & Associates, LLC		
Signature			
Printed name	Nathaniel T. Wallace		
Date	May 2, 2005	Reg. No.	48,909

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name	Melithza Rodriguez	Date	May 2, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

OTPE 30
MAY 05 2005
RECEIVED

PTO/SB/17 (12-04)
Approved for use through 07/31/2008. OMB 0851-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). <h2 style="margin: 0;">FEE TRANSMITTAL</h2> <h3 style="margin: 0;">For FY 2005</h3>		Complete if Known	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Application Number	09/900,334
		Filing Date	July 6, 2001
		First Named Inventor	Peter K. Malkin
		Examiner Name	Laneau, Ronald
		Art Unit	3627
TOTAL AMOUNT OF PAYMENT (\$) (\$) 500.00		Attorney Docket No.	YOR920010313US1 (8728-508)

METHOD OF PAYMENT (check all that apply)

☐ Check
 ☐ Credit Card
 ☐ Money Order
 ☐ None
 ☐ Other (please identify): _____

☒ Deposit Account
 Deposit Account Number: 50-0150 710
 Deposit Account Name: IBM/YORKTOWN HEIGHTS

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below
 ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17
 ☐ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims: _____ **Extra Claims:** _____ **Fee (\$):** _____ **Fee Paid (\$):** _____
 - 20 or HP = _____ x _____ = _____
 HP = highest number of total claims paid for, if greater than 20

Indep. Claims: _____ **Extra Claims:** _____ **Fee (\$):** _____ **Fee Paid (\$):** _____
 - 3 or HP = _____ x _____ = _____
 HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	_____	_____	_____	_____

- 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

	Fees Paid (\$)
Non-English Specification, \$130 fee (no small entity discount)	
Other: Appeal Brief	500.00

SUBMITTED BY

Signature		Registration No. 48,909 (Attorney/Agent)	Telephone 516-692-8888
Name (Print/Type)	Nathaniel T. Wallace	Date	May 2, 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1460.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PATENTS

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

APPLICANT(S): Malkin et al. DOCKET: YOR920010313US1
(8728-508)

SERIAL NO.: 09/900,334 GROUP ART UNIT: 3627

FILED: July 6, 2001 EXAMINER: Laneau, Ronald

FOR: **METHOD FOR DELIVERING INFORMATION BASED ON
RELATIVE SPATIAL POSITION**

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

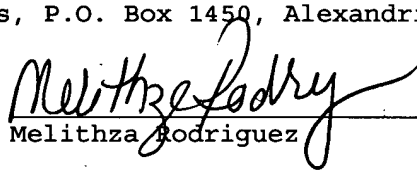
APPEAL BRIEF

In response to the Final Office Action dated October 29, 2004 finally rejecting Claims 1-2 and 5-20 under 35 U.S.C. §102(e) and claims 3-4 under 35 U.S.C. 103(a), Applicant appeals pursuant to the Notice of Appeal filed on February 28, 2005 and submits this Appeal Brief.

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to the: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 2, 2005.

Dated: May 2, 2005


Melithza Rodriguez

05/06/2005 MAHMED1 00000034 500510 09900334

01 FC:1402 500.00 DA

TABLE OF CONTENTS

	<u>Page</u>
1. REAL PARTY IN INTEREST	1
2. RELATED APPEALS AND INTERFERENCES	1
3. STATUS OF CLAIMS	1
4. STATUS OF AMENDMENTS	1
5. SUMMARY OF CLAIMED SUBJECT MATTER	2
6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	4
7. ARGUMENT	4
A. The Claim Rejections Under 35 U.S.C. §102	
Are Legally Deficient	5
i. Claims 1, 15 and 20	5
B. Conclusion	7
8. CLAIMS APPENDIX	8
9. EVIDENCE APPENDIX	NONE
10. RELATED PROCEEDINGS APPENDIX	NONE

1. Real Party in Interest

The real party in interest is International Business Machines Corporation, the assignee of the entire right, title, and interest in and to the subject application by virtue of an assignment of record.

2. Related Appeals and Interferences

None.

3. Status of Claims

Claims 1-20 are pending, stand rejected, and are under appeal.

A copy of the Claims as pending is presented in the Appendix.

4. Status of Amendments

Claims 1, 15 and 20 were amended by the Amendment Under 37 C.F.R. §1.111 filed August 9, 2004. This Amendment was entered.

5. Summary of Claimed Subject Matter

The present invention relates to systems and methods for providing product information to a portable display device according to a position and orientation of the portable display device. The position and orientation of the portable display device is tracked within a local reference frame. Product information is provided to the portable display device according to the position and orientation of the portable display device within the local reference frame.

Referring to claim 1; a method is claimed for providing product information. The method includes establishing a local reference frame which defines a space including a product identifier and a portable display device as described, for example, at page 7, lines 19-20 and page 12, lines 17-20, and in Figures 1, element 1010 and Figure 8, element 8800. The method includes receiving a request for product information corresponding to the product identifier from the portable display device as described at, for example, page 9 line 20 to page 10 line 2, and in Figure 5 element 5030 and Figure 6 element 6030. The method further includes determining a position and an orientation of the portable display device in relation to the local reference frame, as described at, for example, paragraph page 12, lines 17-20, and Figure 6, element 6020. The method includes providing the product information via the

portable display device according to the position and orientation of the portable display device as described at, for example, page 10, lines 18-21 and page 13, lines 3-7, and in Figure 6, element 6050.

Referring to claim 15; a system is claimed for providing a user access to information. The system includes a portable display device within a local reference frame including an object, as described, for example, at page 7, lines 18-20, and in Figure 1, element 1050. The system claims a plurality of positional sensors, as described at page 12, lines 7-17 and page 13, lines 13-17, and in Figure 1, elements 2010-2060 and Figure 3, elements 3020-3040. The system further includes a correlation means for determining the object according to a known position of the object within the local reference frame, and a position and an orientation of the portable display device, as described at page 13, lines 1-8, and in Figure 5, element 5020. The system includes a database for providing, via the portable display device, information corresponding to the object, as described at, for example, page 10, lines 3-13, and in Figure 1, element 2090 and Figure 5, element 5040.

Referring to claim 20; claim 20 includes substantially the limitations of claim 1. References to the specification therefore include the references given for claim 1. Claim 20 is

embodied in a program storage device readable by machine, for example, as described at page 9, lines 13-16, and Figure 4.

6. Grounds of Rejection to be Reviewed on Appeal

A. Claims 1, 15 and 20 stand rejected under 35 U.S.C. 102(e) as being anticipated by Herrod et al. (U.S. Patent No. 6,405,049).

7. Argument

A. The Claim Rejections Under 35 U.S.C. 102 Are Legally Deficient.

Under 35 U.S.C. §102, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim. See MPEP §2131.

i. Claims 1, 15 and 20

It is respectfully submitted that at the very least, Herrod is legally deficient to establish a case of anticipation against independent Claims 1, 15 and 20.

Herrod teaches a terminal and access point for transmitting information concerning products available in the locality of the terminal for display (see col. 10, lines 36-44). Herrod does not teach or suggest a system for "providing the product

information via the portable display device according to the position and orientation of the portable display device" as claimed in claims 1 and 20, nor, "a correlation means for determining the object according to a known position of the object within the local reference frame, and a position and an orientation of the portable display device" as claimed in claim 15.

Herrod teaches that a first function may be performed by a device in a first orientation, and a second function may be performed by the device in a second orientation, i.e., activated in a first orientation and deactivated in a second orientation (see col. 17, lines 2-14). Nowhere does Herrod teach how the system for activating and deactivating a terminal could be used to provide product information or determine an object, much less determine product information or determine an object by position and orientation, essentially as claimed in claims 1 and 20 and claim 15, respectively. Herrod merely teaches a method for turning a terminal on and off according to whether the terminal is in a first orientation or in a second orientation. Nowhere does Herrod teach that a position of the device and an orientation of the device are used in any combined fashion, much less to determine product information. Thus, Herrod does not teach "providing the product information via the portable display device according to the position and orientation of the

portable display device" as claimed in claims 1 and 20, or "a correlation means for determining the object according to a known position of the object within the local reference frame, and a position and an orientation of the portable display device" as claimed in claim 15. Therefore, Herrod fails to teach all the limitations of claims 1 and 20, and 15.

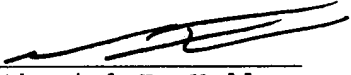
Claims 2-14 depend from claim 1. Claims 16-19 depend from claim 15. The dependent claims are believed to be allowable for at least the reasons given for the respective independent claims.

Accordingly, the rejection of Claims 1-2 and 5-20, and the rejections of Claims 3 and 4 should be overruled.

B. CONCLUSION

The claimed invention is not disclosed or suggested by the teachings of the applied prior art references, either alone or in combination. Moreover, the Examiner has failed to establish a case of anticipation of the presently claimed method under 35 U.S.C. §102 over Herrod with respect to Claims 1, 15 and 20 for at least the reasons noted above. Accordingly, it is respectfully requested that the Board overrule the rejections of Claims 1-2 and 5-20 under 35 U.S.C. §102 and dependent claims 3 and 4 under 35 U.S.C. §103.

Date: May 2, 2005

By: 
Nathaniel T. Wallace
Reg. No. 48,909
Attorney for Appellants

F. CHAU & ASSOCIATES, LLP
130 Woodbury Road
Woodbury, New York 11797
TEL: (516) 692-8888
FAX: (516) 692-8889

8. CLAIMS APPENDIX

1. A method for providing product information comprising the steps of:

establishing a local reference frame which defines a space including a product identifier and a portable display device;

receiving a request for product information corresponding to the product identifier from the portable display device;

determining a position and an orientation of the portable display device in relation to the local reference frame; and

providing the product information via the portable display device according to the position and orientation of the portable display device.

2. The method of claim 1, further comprising the step receiving an order for a product corresponding to the product identifier from the portable display device.

3. The method of claim 1, further comprising the step of receiving a bid for a product corresponding to the product identifier from the portable display device.

4. The method of claim 1, further comprising the step of adding a product corresponding to the product identifier to a user shopping list using the portable display device.

5. The method of claim 1, further comprising the step of providing a menu for distinguishing a plurality of products in the space via the portable display device.

6. The method of claim 1, further comprising the step of redirecting a user toward an alternative product using the portable display device.

7. The method of claim 1, further comprising the steps of:
determining the orientation of the portable display device;
and

selecting between the object and another proximate object on the basis of the orientation of the portable display device.

8. The method of claim 1, wherein the local reference frame is established using an active beacon.

9. The method of claim 8, further comprising the step of determining a position of the portable display device by comparing one of signal strengths of at least two beacons, a

signal transmission time from each of at least two beacons, and an angle between at least two beacons.

10. The method of claim 1, wherein the local reference frame is established using passive environmental markings.

11. The method of claim 10, further comprising the step of determining a position of the portable display device relative to at least one environmental marking.

12. The method of claim 10, further comprising the step of determining a position of the portable display device relative to an angle between at least two environmental markings.

13. The method of claim 1, further comprising the step of retrieving the product information from a database stored in the portable display device.

14. The method of claim 1, wherein the local reference frame is established relative to the portable display device and moves with the portable display device.

15. A system for providing a user access to information comprising:

a portable display device within a local reference frame including an object;

a plurality of positional sensors;

a correlation means for determining the object according to a known position of the object within the local reference frame, and a position and an orientation of the portable display device; and

a database for providing, via the portable display device, information corresponding to the object.

16. The system of claim 15, further comprising a plurality of active beacons defining the local reference frame, wherein the positional sensors are part of the portable display device.

17. The system of claim 15, wherein the correlation means determines the position of the portable display device based on a signal strength of at least one active beacon, wherein the signal strength is determined by the positional sensors.

18. The system of claim 15, where the correlation means determines the position of the portable display device is based on a signal transmission times from each of at least two active beacons.

19. The system of claim 15, further comprising a wireless communication link between the portable display device and a database of product information.

20. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for providing product information, the method steps comprising:

- establishing a local reference frame which defines a space including a product identifier and a portable display device;

- receiving a request for product information corresponding to the product identifier from the portable display device;

- determining a position and an orientation of the portable display device in relation to the local reference frame; and

- providing the product information via the portable display device according to the position and an orientation of the portable display device.